

United States Patent and Trademark Office



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

| APPLICATION NO. | FI | LING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO |
|------------------------|------|------------|-------------------------|-----------------------|-----------------|
| 10/089,237 | 1 | 12/04/2002 | Jon Reynir Vilhjalmsson | P 291112 4573 | |
| 909 | 7590 | 02/06/2004 | | EXAMINER | |
| | | HROP, LLP | GIBSON, RANDY W | | |
| P.O. BOX 10 MCLEAN, | | 2 | | ART UNIT PAPER NUMBER | |
| ·—· ·, | | | | 2841 | |

DATE MAILED: 02/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | Application No. | Applicant(s) | | | | | |
|--|---|--|-------------------|--|--|--|--|
| ^ | 10/089,237 | VILHJALMSSON ET AL. | | | | | |
| Office Action Summary | Examiner | Art Unit | | | | | |
| | Randy W. Gibson | 2841 | Dr. | | | | |
| The MAILING DATE of this communication apperiod for Reply | | • | dress | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a repl - If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailin earned patent term adjustment. See 37 CFR 1.704(b). | 36(a). In no event, however, may a reply be by within the statutory minimum of thirty (30) of will apply and will expire SIX (6) MONTHS fro e, cause the application to become ABANDOI | timely filed days will be considered timely om the mailing date of this co | : mmunication. | | | | |
| Status | | | | | | | |
| 1) Responsive to communication(s) filed on 04 E | <u> 0ecember 2002</u> . | | | | | | |
| ·— | 2a) ☐ This action is FINAL . 2b) ☑ This action is non-final. | | | | | | |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | | | | | | |
| Disposition of Claims | | | | | | | |
| 4)⊠ Claim(s) <u>1-17</u> is/are pending in the application | l . | | | | | | |
| 4a) Of the above claim(s) is/are withdra | | | | | | | |
| 5)☐ Claim(s) is/are allowed. | | | | | | | |
| 6)⊠ Claim(s) <u>1-17</u> is/are rejected. | | | | | | | |
| 7)☐ Claim(s) is/are objected to. | | | | | | | |
| 8) Claim(s) are subject to restriction and/o | or election requirement. | | | | | | |
| Application Papers | | | | | | | |
| 9) The specification is objected to by the Examino | er. | | | | | | |
| 10)⊠ The drawing(s) filed on <u>04 December 2002</u> is/a | are: a) $oxtimes$ accepted or b) $oxtimes$ obje | ected to by the Exam | iner. | | | | |
| Applicant may not request that any objection to the | drawing(s) be held in abeyance. S | See 37 CFR 1.85(a). | | | | | |
| Replacement drawing sheet(s) including the correct | | | | | | | |
| 11)☐ The oath or declaration is objected to by the E | xaminer. Note the attached Office | ce Action or form PT | O-152. | | | | |
| Priority under 35 U.S.C. § 119 | | | | | | | |
| 12) Acknowledgment is made of a claim for foreigr | priority under 35 U.S.C. § 119 | (a)-(d) or (f). | | | | | |
| a)⊠ All b)□ Some * c)□ None of: | | | | | | | |
| 1. Certified copies of the priority documen | | | | | | | |
| 2. Certified copies of the priority documen | | | | | | | |
| 3. Copies of the certified copies of the price | | ived in this National | Stage | | | | |
| application from the International Burea | | | | | | | |
| * See the attached detailed Office action for a list | of the certified copies not recei | veu. | | | | | |
| Attachment(s) | | | | | | | |
| 1) Notice of References Cited (PTO-892) | 4) Interview Summa | | | | | | |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail | Date al Patent Application (PTC |)-152) | | | | |
| 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 1. | 6) Other: | ar aten Application (PTC | -1923 | | | | |
| U.S. Patent and Trademark Office PTOL-326 (Rev. 1-04) Office A | ction Summary | Part of Paper No./Mail Da | ate 02022004 | | | | |



Art Unit: 2841

DETAILED ACTION

Claim Objections

1. Claim 11 is objected to because of the following informalities: the inclusion of a right parenthesis after the word "comprises" in line 2 renders the claim indefinite since there is no matching left parenthesis. Appropriate correction is required.

The term "medium" in claim 17 is a relative term which renders the claim indefinite. The term "medium range" is not defined by the claim since it is not related to anything else in the claimed device.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claim 7 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The technique of using one of the processors to process "subsets" of the first set of data while another processor is analyzing the entire first set of data does not seem to be described in the written description.



Art Unit: 2841

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 5. Claims 1-3, 8-10, and 16 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Hasegawa et al (US # 5,174,400). See column 1, lines 9-62.
- 6. Claims 1-4 and 8-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Nobutsugu (US # 4,790,398). See column 2, lines 54 to column 3, lines 35.

Claim Rejections - 35 USC § 103

- 7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 8. Claims 5 and 6 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Hasegawa et al (US # 5,174,400) and Bullivant (US 5,000,275). See MPEP § 2131.01(III) for multiple reference rejections under section 102.

Art Unit: 2841

It appears from Figure 3 of Hasegawa et al that stability of the weight signal is determined by seeing if a maximum difference (I.E.:"\Delta w") between two different weight signals exceeds a predetermined reference value, but the body of the written description does not expressly state this. However, the reference to Bullivant expressly discloses that stability signals are normally generated by comparing the difference between two successive output signals with a reference value (Col. 7, lines 29-42; Col. 8, lines 26-34). Even if it is determined that the stability detecting technique of Bullivant is not inherently present in the device of Hasegawa et al, it would have been obvious to the ordinary practioner to use the stability detecting technique in the apparatus of Bullivant motivated by the technique's known suitability for its intended use. See *In re Leshin*, 227 F.2d 197, 125 USPQ 416 (CCPA 1960); and, *MPEP* § 2144.07.

9. Claims 11-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hasegawa et al (US # 5,174,400) in view of Inoue et al (US 4,817,026). Hasegawa et al discloses the claimed invention, as discussed *supra*, except they use an analog filter instead of a digital filter and they do not use a digital filter that operates on the principal of averaging the weight data. Inoue et al teaches that it is known to use a digital filter in conjunction with an analog filter to allow each type of filter to compensate for the weaknesses of the other type of filter (Col. 1, line 26 to col. 2, line 65). Therefore it would have been obvious to the ordinary practioner to use a digital filter in the apparatus of Hasegawa et al in conjunction with its analog filter, as suggested by Inoue et al, motivated by the desire to compensate for the inherent weaknesses of the two

Art Unit: 2841

different types of type of filters. See *In re Sernaker*, 702 F.2d 989, 217 USPQ 1 (Fed. Cir. 1983); and, *MPEP* § 2144.

Inoue et al also teach that digital filtering by the technique of progressive averaging is a common type of digital filter; therefore it would have been obvious to use the digital filtering technique of progressive averaging of the weight data in the apparatus of Hasegawa et al motivated by the digital filtering technique's known suitability for its intended use. See *In re Leshin*, 227 F.2d 197, 125 USPQ 416 (CCPA 1960); and, *MPEP* § 2144.07.

10. Claims 11-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nobutsugu (US # 4,790,398) in view of Inoue et al (US 4,817,026). Nobutsugu discloses the claimed invention, as discussed *supra*, except for the use of a digital filter and except for using a digital filter that operates on the principal of progressive averaging of the weight data. Inoue et al teaches that it is known to use a digital filter in conjunction with an analog filter to allow each type of filter to compensate for the weaknesses of the other type of filter (Col. 1, line 26 to col. 2, line 65). Therefore it would have been obvious to the ordinary practioner to use a digital filter in the apparatus of Nobutsugu in conjunction with its analog filter, as suggested by Inoue et al, motivated by the desire to compensate for the inherent weaknesses of the two different types of type of filters. See *In re Semaker*, 702 F.2d 989, 217 USPQ 1 (Fed. Cir. 1983); and, *MPEP* § 2144.

Page 6

Inoue et al also teach that digital filtering by the technique of progressive averaging is a common type of digital filter; therefore it would have been obvious to use the digital filtering technique of progressive averaging of the weight data in the apparatus of Nobutsugu motivated by the digital filtering technique's known suitability for its intended use. See *In re Leshin*, 227 F.2d 197, 125 USPQ 416 (CCPA 1960); and, *MPEP* § 2144.07.

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Randy W. Gibson whose telephone number is (571) 271-2103. The examiner can normally be reached on Mon-Fri., 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David S Martin can be reached on (571) 272-2107. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Randy (V. Gibson Primary Examiner

Art Unit 2841